

FINAL

BASEWIDE

QUALITY ASSURANCE PROJECT PLAN

VERSION 0.0

HILL AIR FORCE BASE, UTAH

JULY 1999

Project No.: 1166076.14180107

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**HILL AIR FORCE BASE
BASEWIDE
QUALITY ASSURANCE PROJECT PLAN**

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LIST OF ACRONYMS

AA	atomic absorption
AALA	American Association of Laboratory Accreditation
AFB	Air Force Base
AFCEE	Air Force Center for Environmental Excellence
AMU	atomic mass unit
AOCs	areas of concern
ASTM	American Society for Testing and Materials
BCHSAMP	Environmental Sampling Data Batch File
BFB	4-Bromofluorobenzene
BTEX	benzene, toluene, ethylbenzene, xylene
°C	degrees centigrade
CCB	continuing calibration blank
CCC	calibration check compound
CCV	continuing calibration verification
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CF	calibration factor
CMS	construction management service
CN	cyanopropyl
CPT	cone penetrometer test
COC	Chain-of-Custody
CRADA	Cooperative Research and Development Agreement
CRQLs	contract required quantitation limits
DCE	dichloroethene
DFTPP	Decafluorotriphenylphosphine
DNAPL	dense nonaqueous phase liquid
DOD	Department of Defense
DQO	data quality objective
DRO	diesel range organic
EICP	extracted ion current profile
ELCD	electrolytic conductivity detector
EMR	Environmental Management Directorate, Restoration Division
ERA	Environmental Restoration Account
ERPIMS	Environmental Restoration Program Information Management System
°F	degrees fahrenheit
FFA	Federal Facility Agreement
FID	flame ionization detector
FS	Feasibility Study
FSP	Field Sampling Plan
ft	feet
g	gram
gals	gallons
GC	gas chromatograph

GC/FID	gas chromatograph/flame ionization detector
GC/MS	gas chromatograph/mass spectrometer
GFAA	graphite furnace atomic absorption
GIS	Geographic Information System
gpm	gallons per minute
GRO	gasoline range organics
HPLC	high performance liquid chromatography
HRGC/HRMS	high resolution gas chromatograph/high resolution mass spectrometer
HRGC/LRMS	high resolution gas chromatograph/low resolution mass spectrometer
IC	ion chromatography
ICAL	initial calibration
ICB	initial calibration blank
ICBM	Intercontinental Ballistic Missile
ICP	inductively coupled plasma
ICP-MS	inductively coupled plasma-mass spectrometer
ICS	interference check standard
ICV	initial calibration verification
IDW	investigation-derived waste
IRP	Installation Restoration Program
IS	internal standards
IWTP	industrial wastewater treatment plant
K-D	Kuderna-Danish
LCS	laboratory control sample
LCSD	Laboratory control sample duplicate
LIMS	Laboratory Information Management System
LMTA	Little Mountain Test Annex
LNAPL	light non-aqueous phase liquid
MCL	maximum contamination level
MD	matrix duplicate
MDL	method detection limits
mg/kg	milligram per kilogram
mg/l	milligram per liter
ml/min	milliliters/minute
MS	matrix spike
MSD	matrix spike duplicate
MS/MSD	matrix spike/matrix spike duplicate
NA	not applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
ng/kg	nanogram per kilogram
ng/l	nanogram per liter
NIST	National Institute of Standards and Technology
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OO-ALC	Ogden Air Logistics Center

OUs	operable units
OVA	organic vapor analyzer
PAs	preliminary assessments
PA/SI	Preliminary Assessment/Site Investigation
PAH	polynuclear aromatic hydrocarbon
PARCC	Precision, Accuracy, Representativeness, Completeness and Comparability
PCBs	polychlorinated biphenyls
PCDDs	polychlorinated dibenzodioxins
PCDFs	polychlorinated dibenzofurans
PDF	page document file
PID	photoionization detector
PM	project manager
ppbv	parts per billion volume
PQLs	practical quantitation limits
QA	quality assurance
QA/QC	quality assurance/quality control
QAO	Quality Assurance Officer
QAPP	Quality Assurance Project Plan
QC	quality control
r	Correlation Coefficient
RBCA	Risk Based Corrective Action
RCRA	Resource Conservation and Recovery Act
RD/RA	remedial design/remedial action
RF	response factor
RI/FS	Remedial Investigation/Feasibility Study
RI/SI	Remedial Investigation/Site Investigation
ROD	Record of Decision
RPD	relative percent difference
RRF	relative response factor
RSD	relative standard deviation
RT	retention time
SAPs	Sampling and Analysis Plans
SC	specific conductance
S/N	signal to noise ratio
SARA	Superfund Amendments and Reauthorization Act
SIM	selected ion monitoring
SOPs	Standard Operating Procedures
SPCC	system performance check compound
SVOCs	semi-volatile organic compounds
TDS	total dissolved solids
TEF	toxicity equivalence factors
TEQ	toxicity equivalent concentration
TOC	total organic carbon
TOX	total organic halogens
TPH	total petroleum hydrocarbon
TSS	total suspended solids

UDEQ	Utah Department of Environmental Quality
UDERR	Utah Division of Environment Response and Remediation
UDWQ	Utah Division of Water Quality
µg/kg	microgram per kilogram
µg/l	microgram per liter
µg/ml	microgram per milliliter
UGWP	Utah Ground-Water Protection Program
USACE	United States Army Corps of Engineers
USCS	Unified Soil Classification System
U.S. EPA	United States Environmental Protection Agency
UST	underground storage tank
UTTR	Utah Test and Training Range
VOCs	volatile organic compounds
WAFAP	Wendover Air Force Auxiliary Field
XRF	X-ray Fluorescence Spectroscopy

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